

Quick Statistics

Early Site Permits issued	3
Permits under review	1
COL applications submitted	16
No. reactors submitted	25
COL applications docketed	10
No. reactors docketed	17
Total expected license applications	23
Expected number of reactors	34
Certified reactor designs	2
Reactor designs under review	4
Announced plant locations	20
Companies applying for COL	20

Number of Planned Reactors (34)



Status of License Applications (23)



Announced Nuclear Locations

- Bell Bend (PA)—PPL (formerly Susquehanna)
- Bellefonte (AL)—Tennessee Valley Authority
- Elmore County (ID)—Alternate Energy Holdings
- Callaway (MO)—AmerenUE
- Calvert Cliffs (MD)—UniStar
- Clinton (IL)—Exelon
- Comanche Peak (TX)—Luminant
- Fermi (MI)—DTE Energy
- Grand Gulf (MS)—Entergy
- Shearon Harris (NC)—Progress Energy
- Levy County (FL)—Progress Energy
- Nine Mile Point (NY)—UniStar
- North Anna (VA)—Dominion Energy
- River Bend (LA)—Entergy
- South Texas Project (TX)—STP Nuclear
- V.C. Summer (SC)—SCE&G
- Turkey Point (FL)—Florida Power & Light
- Victoria County (TX)—Exelon Generation
- Vogtle (GA)—Southern Nuclear
- William States Lee III (SC)—Duke Energy

Vendor Technologies Under Consideration

General Electric

- Advanced Boiling Water Reactor (ABWR) – 1,356 MWe (*certified 10CFR52 App A*)
- Economic Simplified Boiling Water Reactor (ESBWR) – 1,560 MWe

Westinghouse

- Advanced Passive Pressurized Water Reactor (AP1000) – Twin units 1,117 MWe each (*certified 10CFR52 App D*)

AREVA

- United States Evolutionary Pressurized Water Reactor (US EPR) – 1,600 MWe

Mitsubishi Heavy Industry

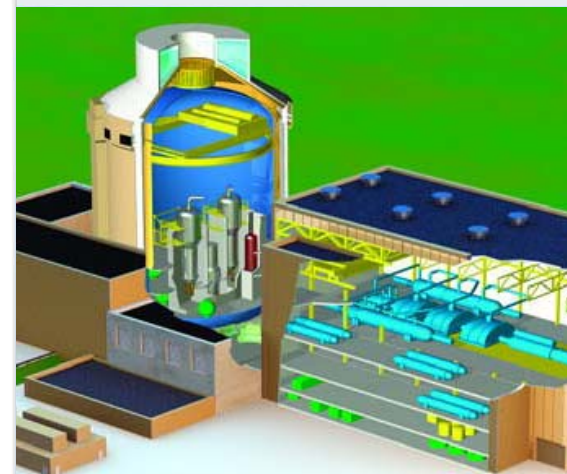
- United States Advanced Pressurized Water Reactor (US APWR) – 1,700 MWe



U.S. Department of Energy
Office of Nuclear Energy

Nuclear Power Deployment Scorecard

Powering Future Decades



U.S. Department of Energy
Office of Nuclear Energy

October 6, 2008

Updates available at
<http://www.nuclear.gov>

What's New

NRC docketed Progress Energy's COL application for two reactors in Levy County, FL on October 6, 2008.

Constellation Energy submitted a COL application on September 30 to build an EPR at Nine Mile Point in New York.

Seventeen power companies submitted 19 loan guarantee applications for 14 sites with a total of 21 reactors by the Part I deadline of 9/29/08.

Two fuel cycle companies have submitted loan guarantee applications by the 9/29/08 deadline.

On September 26, NRC announced a hearing for opportunity to intervene in UniStar's Calvert Cliffs COL. The date has not yet been established.

Entergy submitted a COL application to build an ESBWR at its River Bend facility in Louisiana on September 25.

NRC and the Army Corps of Engineers signed a Memorandum of Understanding on September 23, outlining each agency's role in the environmental aspect of nuclear plant licenses.

Luminant submitted a COL application for two US-APWR reactors at Comanche Peak near Glen Rose, TX on September 19. Luminant and Mitsubishi agreed to form a joint venture to develop the facility.

Detroit Edison submitted a COL application to build an ESBWR at its Fermi facility near Newport, MI on September 18.

Legend



Implementation proceeding according to plan and schedule



Progress being made; however, issues or uncertainties exist that could impede progress



Unlikely to realize objectives absent significant management attention



No dates or end state established



Indicates change in status or progress since last evaluation



Regulatory Demonstration completed. No further government assistance is warranted.

Nuclear Power Deployment Scorecard



Early Site Permit (ESP)

- Three site permits issued by NRC (*Clinton, Grand Gulf, North Anna*)
- One site permit application under NRC review (*Vogtle*)
- Submission of three other ESP applications expected in 2010-2012



Combined Construction and Operating License (COL)



License Applications Submitted to NRC

- Ten COLAs docketed (*STP, Bellefonte, Harris, Grand Gulf, North Anna, Lee, Calvert Cliffs, Vogtle, V.C. Summer, and Levy Co.*)
- Six pending acceptance (*River Bend, Callaway, Victoria Co., Fermi, Comanche Peak, Nine Mile Pt.*)
- Submission of 8 additional COLs expected in 2008-2010
- One application expected in October (*Bell Bend*)



Status of Reference R-COLs

- All five R-COLs have been submitted; four (*Bellefonte, North Anna, Calvert Cliffs, South Texas*) have begun Phase 1 of the Safety Review
- Comanche Peak is undergoing NRC acceptance review for docketing



Reactor Design Certification (DC)

- Two advanced reactor designs certified by NRC (*ABWR and AP1000*)
- Four reactor designs undergoing NRC review (*ESBWR, US-EPR, AP1000 amend., and US-APWR*)



New Nuclear Plant Orders



Long-Lead Equipment Orders

- Nine utilities have ordered large, long-lead nuclear component forgings from three reactor vendors
- Twenty-four reactor coolant pumps have been ordered for AP1000 units
- Japan Steel Works is only manufacturer of ultra-large forgings; worldwide-capacity limited



Engineering, Procurement, and Construction Contracts (EPC)

- Two EPC contracts initiated (*Vogtle and V.C. Summer*)
- Plant engineering is in progress; completion required to start construction



New Nuclear Plant Construction, Operation, & Deferral

- No utility has committed to constructing a new advanced reactor
- TVA has resumed construction of Watts Bar Unit 2 with completion scheduled in 2013



Federal Financial Incentives



Standby Support (Risk Insurance)

- Final 10 CFR Part 950 Rule issued August 11, 2006
- Three Notices of Intent to Request a Conditional Agreement received by DOE



Production Tax Credits

- Internal Revenue Bulletin 2006-18 published May 2006



Energy Facility Loan Guarantee

- DOE issued solicitations for \$18.5 billion in loan guarantees for new nuclear facilities and \$2 billion for the nuclear fuel cycle on June 30, 2008
- Seventeen power companies have submitted 19 applications for 14 sites. Two companies have submitted loan guarantee applications for fuel cycle facilities.
- As construction cost estimates rise, authorized amount for loan guarantees may be insufficient to catalyze follow-on nuclear construction fully financed by the private sector